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ABSTRACT

This study examined the association between financial difficulties of institutions of higher education and their organizational effectiveness with 334 colleges and universities. An investigation of this relationship was made using three variables: a decline in required financial resources, degree of organizational effectiveness, and a set of 12 dysfunctional organizational attributes associated with downsizing. Surveys were distributed to trustees, institutional administrators, and academic department heads at 334 four-year colleges and universities with responses from 927 trustees, 1321 administrators, and 1158 department heads. The nine dimensions of organizational effectiveness identified by Cameron (1978) were measured and colleges and universities were then categorized as high, medium, or low performance organizations, based on their composite scores on these dimensions. The presence of the dysfunctional attributes was also assessed for each institution. The results indicated that institutions facing downsizing and financial decline can remain effective if negative organizational attributed are not allowed to emerge. If, however, these do emerge, then organizational effectiveness is reduced. Five tables and figures are appended. (Contains 50 references.) (JLS)

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Maintaining Effectiveness Amid Downsizing and Decline in Institutions of Higher Education

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Jean Endo
Editor
AIR Forum Publications

Maintaining Effectiveness Amid Downsizing and Decline

in Institutions of Higher Education

Abstract

The amount of cutback, downsizing, and decline in U.S. higher education is at unprecedented levels and equals the prevalence of downsizing in the corporate sector. Because the consequence of downsizing in the private sector is often negative, the question is whether or not financial decline and downsizing in higher education also leads to ineffectiveness. This study of 334 colleges and universities found that institutions with declining resources are as effective as institutions with abundant resources. Institutions that develop attributes labeled "the dirty dozen," however, perform less effectively.

Maintaining Effectiveness Amid Downsizing and Decline

in Institutions of Higher Education

Colleges and universities, like businesses, face an increasingly inhospitable environment. In particular, the threat of failure is now a more real than ever. It is not news, for example, that downsizing, restructuring, and decline have been prevalent in American business for more than a decade. Downsizing has become the norm rather than an exception practiced by only a few organizations in trouble (see Cameron, 1994; Cameron, Freeman, & Mishra, 1993). It is still rare to go a week without reading about one more firm's massive layoff or downsizing effort in the national news. In fact, a recent survey of U.S. business found that between one third and one half of the medium and large firms in the U.S. have downsized *every year* since 1988 (Henkoff, 1994). Another survey of businesses in Canada, France, Germany, Great Britain, Japan, and the United States found that more than 90 percent had downsized, with more than two-thirds planning to do it again in the near future.

Because downsizing and decline are linked mainly to competitive pressures in the business world, they have generated less interest in the scholarly higher education literature. A series of articles on institutional decline and retrenchment in the 1980s addressed the phenomenon in higher education (e.g., Cameron, Kim, and Whetten, 1987; Cameron, Whetten, and Kim, 1987; Hardy, 1989; Zammuto, et al., 1983), but little empirical work has appeared in the last decade or so. One reason for this dearth is that higher education has traditionally been seen as immune from the market competition

and global encroachments typical of private sector business. The economic conditions that have led to massive layoffs, reductions, and even demise in the private sector have been viewed as outside the domain of the higher education enterprise.

This dearth of empirical research is unfortunate, however, because downsizing and decline are a very significant part of the current conditions faced by institutions of higher education. Whereas pressure to downsize has been traditionally viewed as a private sector disease, it has more recently become a prevalent condition in colleges and universities. As much downsizing and decline is happening in higher education, in other words, as is occurring in business.

For example, higher education is purported to be "in the worst financial shape in the last 50 years" (Harvey, 1992). Nearly half of the 807 college presidents polled by U.S. News & World Report in 1992-93 reported that their institutions face continuing deficits, and nearly a third of the colleges and universities in America are not likely to achieve a balanced budget until after the year 2000 (Elfin, 1993). At least one institution per year has closed its doors over the last decade, including four public institutions (Mooney, 1992). Zammuto et al. (1983) reported that the institutional death rate in higher education matched or exceeded the business death rate during the early 1980s, and the economic conditions have worsened since then. Nearly 60 percent of U.S. colleges cut their budgets in 1991-92, 34 percent repeated the cuts in 1992-93, and 38 percent did it again in 1993-94 (Almanac, 1993). Only 20 percent of America's colleges and universities in 1996 were reported to be financially healthy (Hancock & McCormick, 1996).

Some random examples of notable institutions' troubles highlight this point. In the year 1992, Harvard ran a $42 million deficit (The Economist, 1992), Yale deferred $1 billion in maintenance (Nicklin, 1992), City University of New York cut $40 million from its budget (Lazerson & Wagner, 1992), UCLA cut $38 million (Mercer, 1993), and the University of California System cut $900 million. Recently, Yale eliminated 50 arts and sciences faculty (Hancock & McCormick, 1996), MIT offered 1400 employees--including 300 tenured professors--a buyout package (Hancock & McCormick, 1996), and the University of California eliminated 3500 positions while doubling tuition (Abdelnour, 1992). The University of Maryland closed 56 academic departments on its 11 campuses and reorganized 59 others (Mercer, 1992a). San Diego State laid off 147 tenured professors and eliminated nine academic departments (Chronicle, 1992); Arizona State University ran a $15 million deficit even after cutting nearly 200 teaching positions (Arizona State Outlook, 1992); and Ohio State cut out $78.7 million and nearly 500 faculty slots (Mercer, 1992b).

Investigating Financial Distress and Effectiveness

This rash of downsizing and restructuring in American higher education is generally a response either to declines in absolute levels of revenues in institutions (i.e., deteriorating financial resources) or to revenue streams that are outstripped by escalating costs (i.e., financial resources do not keep pace with expenses). Either way, it is reasonable to assume that the concomitant economic pressures will affect the performance of American institutions of higher education.

Cameron and colleagues (1986, 1987), for example, argued that an aftermath of scarcity and decline is deteriorating organizational performance and the emergence of various institutional dysfunctions (e.g., low morale, loss of innovation). On the other hand, a variety of observers have argued that American higher education remains the standard of the world and is highly effective in its performance. Boulding (1975) and Weick (1975), for example, argued that these institutions are among the most well-adapted of all organizations to current environmental conditions. The economic benefits to individuals who graduate from college is well-documented, with college graduates likely to enjoy lifetime earnings more than twice as great as those who do not graduate (Bureau of the Census, 1994). Anecdotal evidence from large international groups of senior academic administrators in Beijing, China, and St. Petersburg, Russia (Cameron, 1991)--all of whom indicated that the U.S. higher education system is the standard for the world—suggests that institutional performance in American higher education is enviable.

An important issue, in other words, is whether or not the quality of American higher education is affected by this recent decline in revenue levels. That is, a key research question that remains, as yet, uninvestigated empirically is: *Is a decline in required levels of financial resources associated with a deterioration in effectiveness in colleges and universities?*

Some have argued that the escalating costs of higher education are not translated into equivalent increases in quality and effectiveness. A common criticism of higher education is that institutions are requiring more but providing less. For example,

while the average tuition bill increased from approximately $5000 in 1965 to approximately $16,000 in 1993, the average number of class days declined from 191 to 157 days per year (National Association of Scholars, 1995). This substantial increase in "inputs" coupled with the reduction in "output" days causes some to argue that the effectiveness of higher education has deteriorated. On the other hand, the economic benefits of a higher education degree remain substantially above those of non-college attendance, and American higher education institutions continue to be judged as world class (Burrup, Brimley, & Garfield, 1996). Organizational effectiveness, it is argued, remains high in higher education. The point is, the association between the financial distress of colleges and universities and their organizational effectiveness remains an important but unresolved issue.

The Key Variables

This study attempts to address this issue directly by investigating the relationship between financial difficulty in institutions of higher education (i.e., a decline in required levels of revenues) and the organizational effectiveness of those institutions. In particular, three sets of variables are assessed in the study: a decline in required financial resources (labeled "decline"), organizational effectiveness (labeled "performance") and a set of dysfunctional organizational attributes frequently associated with downsizing, restructuring, and/or decline (labeled "the dirty dozen"). Figure 1 summarizes the relationships being investigated.

Figure 1 goes here

Decline. We use "decline" as a proxy for difficult financial circumstances in institutions because it is a reliable way to assess a condition that leads to downsizing and program closure. It is both a more conservative and a more accurate measure of financial difficulty than assessing a ratio of costs to revenues. Using "decline" as the variable of choice also makes it possible to identify institutions experiencing financial stress even though they have not downsized or eliminated programs. Decline may be assessed, as well, using both perceptual and objective measures. That is, respondents are able to rate the extent to which resources relative to requirements are declining, for example, whereas they are often not able to provide accurate ratings of resource adequacy (Parker & Zammuto, 1986). The universal answer to the question, "Are resource levels adequate?" is "No." It is difficult to find any institution that feels flush, feels adequately compensated, or feels that it has abundant resources. To separate institutions suffering truly inadequate resource levels from those that have sufficient levels to operate normally, we focused on the most conservative measure, a *decline* in revenues.

In this study, we compared institutions that were experiencing stagnant or declining resource levels to those that were not. To determine which institutions were in this state, actual measures of the amount of revenues available to the institution were obtained. When actual revenues remained the same or deteriorated from one year to the next, institutions were placed in the category of being in financial distress or "decline."

Effectiveness. Definitions and measurements of organizational effectiveness in colleges and universities have been a conundrum. Traditionally, measuring effectiveness has been so confusing that some scholars have advocated abandoning the concept (Goodman, atkin, and Schoorman, 1983). As explained by Cameron and Whetten (1996), models of organizations have become progressively more complex and, consequently, so have approaches to assessing the effectiveness of organizations. In higher education, the dominant approach for many years was to rely on a single overall assessment such as reputation ratings (see Webster, 1985). Relatively little sophistication characterized those assessments, yet the approach still dominates the ratings of colleges and universities produced in the popular press (e.g., U.S. News and World Report).

More recently, assessments in the scholarly literature have begun to take into account a much more complex view of higher education institutions including considerations of multiple constituencies, environmental contingencies, and the paradoxical nature of organizational performance (see Cameron, 1986). One way to account for a more complex view of effectiveness is to address explicitly the seven "critical questions" proposed by Cameron (1980) as the foundation for all effectiveness studies. These questions provide structure to the complex web of possible criteria relevant to institutional performance. They include: (1) What time frame is employed in the assessment? (2) What level of analysis is used in the assessment? (3) From whose perspective is effectiveness judged in the assessment? (4) On what domain of activity is the judgment focused? (5) What is the purpose of the evaluation? (6) What

type of data are being used in the assessment? (7) What is the referent against which effectiveness is judged?

In this study we measured the nine dimensions of organizational effectiveness initially developed by Cameron (1978) for colleges and universities (listed in Table 1). In reference to the critical questions above, these nine dimensions focus on: (1) the current performance of the institution, meaning a short-term time frame; (2) the overall institutional level of performance (as opposed to, say, the department or individual faculty member level); (3) the perspectives of central administrators and faculty department heads who have knowledge of the overall institution's functioning; (4) three domains of activity including a morale domain (i.e., student, faculty, and administrator satisfaction), an academic domain (i.e., student and faculty productivity and scholarly development), and an external domain (i.e., responsiveness to external constituencies and resources); (5) a purely research and institutional feedback purpose so that institutions were not threatened or embarrassed by providing accurate data; (6) both objective data (i.e., revenues) and perceptual data (i.e., questionnaires) were obtained; and (7) the performance of other institutions in the sample served as the comparative referent.

Table 1 goes here

In sum, effectiveness was assessed by asking knowledgeable administrators and faculty members to describe various aspects of institutional performance. Colleges and universities were then categorized as high, medium, or low performance

organizations based on their composite scores on these nine organizational effectiveness dimensions.

The Dirty Dozen. Cameron (1995) reported that when most private sector organizations engage in downsizing or experience financial distress, a set of negative organizational attributes tend to arise (see Table 2). These negative factors presumably inhibit organizational effectiveness, which seems to account at least partially for the reported deterioration in organizational performance after downsizing (see Cameron, 1994). These same negative organizational attributes have also been found in declining higher education institutions as well (Cameron, Kim, & Whetten, 1987). That is, the presence of decline and "the dirty dozen" seem to be connected across business and higher education sectors. It is not clear from empirical evidence, however, if these negative attributes are significantly associated with institutional effectiveness, the key research question being investigated in this study.

Table 2 goes here

These twelve negative attributes include the "threat-rigidity response" (Staw, Sandelands, & Dutton, 1981) in which organizations become rigid, hunker-down, and become turf-protective. Organizations become more conservative, and innovation, which is inherently costly and risky, declines. Communication channels become constricted, only good news is passed upward, and information sharing is attenuated. The emergence of organized, vocal, special interest groups increases the levels of politicking and conflict among organization members, so employee morale suffers. A "mean mood" overtakes the organization. Slack resources (such as contingency

accounts, reserves, or new project funds) are eliminated which sacrifices flexibility and the ability to adapt to future changes. Savings are used to meet operating expenses. An escalation of centralized decision making occurs where top managers increase their control over a decreasing resource pool, and mistakes become both more visible and less affordable. Lower level organization members become increasingly fearful of making important (or risky) decisions without the approval or sign-off of upper management. This centralization leads to scapegoating of top leaders, however, as the frustrations and anxieties of organization members mount. The credibility of the top leaders suffers because of their implied failure to avoid the painful circumstances the organization is experiencing. A short-term orientation predominates so that long-term planning is abandoned.

In this study, the presence of these twelve negative attributes was assessed in each institution. As described in the next section, statistical analyses were conducted to examine the relationships among the presence of "the dirty dozen", decline and financial distress, and organizational effectiveness.

Relationships Among Decline, The Dirty Dozen, and Effectiveness

Extensive literatures exist on the topics of decline (or financial stress) and downsizing in organizations. Unfortunately, much of that literature is descriptive, focused on a single organization, and non-empirical. Moreover, it is not very helpful in addressing the key research question that guides this study. Looking at decline first, it is ironic that most empirical work on organizational decline ceased about the time a sourcebook was published which attempted to summarize the key literature and to

serve as a foundation for future investigations (Cameron, Sutton, & Whetten, 1988). It was pointed out in that book that "this literature is fragmented, confusing, and frequently contradictory" (p.9). As an example, one study found that decline led to rigidity, conflict, and turnover (Cameron, Kim, & Whetten, 1986), whereas another found that it produced innovation and a stimulus for expansion (McMillan, 1985). One study found that layoffs reduced productivity (Greenhalgh, 1983), while another series of laboratory studies found that layoffs led to increases in productivity (Brockner, Davy, & Carter, 1985).

The same confusion is typical of the downsizing literature. On the one hand, one survey of managers in downsized organizations found that morale, trust, and productivity suffered as a result of downsizing, and half of the 1468 firms in another survey indicated that productivity deteriorated after downsizing (Henkoff, 1990; Bennett, 1991). McKinley (1992) found that downsizing actually increased costs, bureaucracy, and redundancy in organizations instead of reducing them. On the other hand, Leana and Feldman (1989) and Schweiger and DeNisi (1991) all found in separate studies that downsizing led to improved productivity, reduced stress, and increased employee commitment. None of those studies were conducted in institutions of higher education.

Turning to the literature on "the dirty dozen," their presence has been detected in investigations of decline and various forms of downsizing by Billings, Milburn, and Schaalman (1980), Cameron, et al. (1987), Cole (1993), Levine (1978), Rubin (1979), and others. Each of these investigations examined "the dirty dozen" as an outcome or effect of fiscal stress and scarcity-induced change. None of the studies, however,

treated "the dirty dozen" as a predictor of effectiveness. Whereas it seems clear that a positive relationship exists between decline and the presence of "the dirty dozen", the relationship between effectiveness and "the dirty dozen" has not been addressed empirically. It is reasonable to assume that organizations characterized by low levels of morale, commitment, and innovation along with high levels of scapegoating, conflict, and politicking would perform less effectively. However, since a large majority of U.S. organizations have downsized in the last five years, since downsizing and the emergence of "the dirty dozen" seem to be positively correlated, and since performance among many of these downsized firms has skyrocketed (e.g., automobile companies, computer manufacturers, telephone companies all are reporting record profits), it is not clear that a negative association between "the dirty dozen" and effectiveness can be taken for granted.

In other words, especially as it pertains to higher education, the literature is in need of an empirical investigation of the relationships between the declining financial revenues currently being experienced by a large number of higher education institutions (i.e., "decline"), the negative attributes that often arise when such conditions occur (i.e., "the dirty dozen") and the organizational effectiveness of the institutions (i.e., "performance"). Investigating these relationships is the primary objective of this study.

Research Procedures

Sample. Data for this study were obtained as part of a national study of the organizational effectiveness of 334 four-year colleges and universities. An average of 21 surveys, evenly divided among trustees, institutional administrators, and academic

department heads, were sent to each institution. Responses were received from 1321 administrators, 1158 department heads, and 927 trustees, for an overall response rate of 49 percent. The responses were aggregated at the institutional level for purposes of analysis. This is because questions were worded so as to describe institutional characteristics and behaviors, so the resulting responses were best analyzed at the institution level. Empirical support for aggregation at the institutional level is provided Zammuto and Krakower (1991) who used intraclass correlations (Winer, 1971) and other correlational analyses to demonstrate a dependence among responses within institutions. Utilizing respondent level analyses within an analysis of variance context, they found, violates the assumption of independent errors. As a result, the standard error would be too small and would result in liberal tests of significance (Stevens, 1992). Hence, the institution is the appropriate level of analysis. The current study is based on 332 institutions that have valid information on each of the variables described below.

Variables. Three sets of variables are assessed in the study: a decline in actual financial resources (labeled *"decline"*), organizational effectiveness (labeled *"performance"*), and a set of twelve dysfunctional attributes frequently associated with downsizing, turbulence, uncertainty, and/or decline (labeled *"the dirty dozen"*). The *decline* measure was based on the actual revenue patterns of the institutions for the three-year period preceding the current study. Institutions were classified as either declining (n=114), stable (n=107), or increasing (n=111) based on their revenue patterns over a three-year period. The 114 institutions in the declining category had experienced an average loss of 9.20 percent in revenues over the three-year period.

Those in the stable category had experienced 4.52 percent growth rate in revenues, less than the rate of inflation over the three-year period. Institutions in the increasing category had experienced an average growth in revenues of 20.56 percent.

The *performance* measure was derived from a composite score on the nine dimensions of organizational effectiveness developed initially by Cameron (1978) and shown in Table 1. These survey questions have been used widely in studies of effectiveness in higher education institutions, and their validity and reliability have been well-established (e.g., Cameron, 1987; Smart and St. John, 1996). A composite performance score was computed for each institution inasmuch as our intent in this study was to investigate the overall performance of institutions, not specific aspects of their effectiveness profile. Thus, a frequency distribution of the 334 institutions in the study was produced, resulting in 111 institutions being classified as high performers, 111 institutions being classified as average performers, and 110 institutions being classified as low performers. Because effectiveness scores were converted to Z-scores, high performers' mean scores averaged 17.95, average performers' scores averaged 1.61, and low performers' scores averaged -19.58.

The *dirty dozen* measures were assessed by survey items focusing on the twelve dysfunctional institutional attributes shown in Table 2. Specifically, variables measured include centralization, short-term focus, loss of innovativeness, resistance to change, decreasing morale, politicized interest groups, nonprioritized cutbacks, loss of trust, increasing conflict, restricted communication, lack of teamwork, and scapegoating

leaders. Mean scores were computed for each of these twelve variables for each institution.

Analyses. The initial step in the analysis was to determine the relationship between the revenue patterns of institutions and their levels of performance. Because both of these measures were ordinal in nature, a chi-square analysis was used to determine whether a relationship exists between three levels of *decline* (namely, declining, stable, and increasing), and three levels of *performance* (namely, high, average, and low) for all institutions. The second step in the analysis focused specifically on institutions experiencing acute decline (n=114). We sought to determine if differences exist in the presence of "the dirty dozen" variables among institutions classified as having high levels of performance (n=30), average levels of performance (n=34), or low levels of performance (n=51). Multivariate analysis of variance (MANOVA) procedures were used to examine these relationships. The independent variable was the performance level of the institutions (high performers = 30 institutions, average performers = 34 institutions, and low performers = 51 institutions). The dependent variables were institution scores on the twelve dysfunctional attributes shown in Table 2. Again, the underlying question being investigated is, does the decline being experienced by American colleges and universities have a significant relationship to their performance?

Results

The chi-square value of 18.88 ($df = 4$, $p < .001$) indicates that a relationship does exist between the financial condition of these 332 institutions and their organizational

performance. Inspection of Table 3 shows that a significantly higher proportion (47 percent) of institutions that had experienced increasing revenues were classified as high performing institutions than were classified as stable or decreasing. Only 27 percent of institutions with a stable revenue pattern were high performers, and only 26 percent of institutions with a decreasing revenue pattern were high performers. Thus, it seems clear that increasing revenues and higher institutional performance go together. At the same time, however, the results in Table 3 clearly demonstrate that some institutions experiencing a serious decline in financial resources (i.e., decreasing revenues) do maintain average and high levels of performance. This is evident from the fact that over half of the 114 institutions that had experienced a serious decline in financial resources are in the average (n = 34; 30 percent) or high (n = 30; 26 percent) performance categories. In other words, a large number of institutions do not experience a decline in performance just because their revenues decrease.

Table 3 goes here

These results led to our subsequent investigation of the potential reasons why some institutions experiencing serious decline maintain average or high performance levels while other institutions experience a concomitant decline in performance. We focused our attention on the 114 institutions that experienced a significant decrease in their revenue patterns. We examined whether differences exist in the presence of "the dirty dozen" attributes among institutions classified as low (n = 50), average (n = 34), or high (n = 30) in terms of their performance levels. In other words, of the institutions

facing severe decline, we investigated the extent to which performance levels are associated with the presence of "the dirty dozen."

The resultant multivariate F-ratio of 3.81 (df = 24/196; $p < .001$) from the MANOVA indicates that a significant overall difference exists in the presence of the twelve dysfunctional attributes for high, average, and low performing institutions who had experienced serious financial decline. Inspection of the univariate F-ratios in Table 4 shows statistically significant differences among the three performance levels on ten of the twelve dysfunctional attributes.

Two noteworthy patterns emerge from inspection of the group means presented in Table 4. First, the mean scores for the 30 high performing institutions on all twelve of the dysfunctional attributes are lower than the respective means for institutions classified in the average and low performance categories. This means that "the dirty dozen" attributes are less present on high performing campuses. Second, the mean scores of the 34 average performing institutions are lower than the respective means for the 50 institutions in the low performance category with a single exception ("Interest groups are more vocal"). These two broad patterns suggest that institutions experiencing financial difficulties may maintain average to high performance levels if they are able to avoid the presence of "the dirty dozen" as they adjust to these difficulties. In other words, institutions experiencing conditions of decline perform poorly primarily when they are characterized by the dirty dozen attributes. When they avoid developing those negative characteristics, they tend to maintain moderate to high

effectiveness. Thus, *"the dirty dozen" are better predictors of organizational ineffectiveness than is financial decline.*

Inspection of the F-ratios in Table 4 reveals that only two of the twelve negative attributes are statistically non-significant in differentiating low performers from average and high performers. They are "Morale is decreasing" and "No place to cut expenditures." The other ten attributes significantly distinguish institutions that perform at average and high levels from institutions that perform at low levels.

Table 4 goes here

In retrospect, it is reasonable to assume that both of the non-significant attributes are associated with a wide variety of factors within the institution, and financial stress or performance may not be important determinants. Declining morale and a reticence to identify targets for cutback may be present in institutions for a variety of reasons, many of which may be completely disconnected from the fiscal situation or organizational performance. For example, athletic team won-loss records, town-gown tensions, and interdepartmental competition may be associated with institutional morale but are independent of decline or performance. Not being able (or willing) to identify a target for reductions--i.e., a conservative orientation toward cutbacks--may be a property of the institution's culture and tradition regardless of institutional decline or performance.

The other ten attributes, on the other hand, are significant predictors of institutional performance levels under conditions of decline. These attributes, identified in Cameron, et al. (1987) as representing two main themes--leadership actions and institutional member reactions--help explain why institutions experiencing decline

demonstrate a range of performance levels. In other words, analysis of the individual "dirty dozen" attributes produces support for the conclusion that when institutions allow themselves to develop these negative attributes, institutional performance suffers.

Discussion

We began this paper by reviewing evidence for the ubiquitous presence of financial difficulty and decline in institutions of higher education. Few institutions are immune from the pressure to downsize, to reorganize, or to rethink traditional educational activity because of budgetary pressures. At the same time calls for accountability are escalating, pressures for quality are increasing, and competition from corporate universities such as Motorola University, Disney University, or G.E.'s Crotonville Campus is intensifying, colleges and universities are facing a period of severely constrained revenues and a less than benevolent environment. Fiscal decline is extensive.

Richard Cyert, former president of Carnegie Mellon University, characterized the challenge this way: "The major problems that will face the managers of colleges and universities in the coming decade can be put quite simply: How can the attention of faculties and administrators be kept focused on maintaining excellence in the face of overwhelming forces pulling their attention to mere survival?"

The higher education industry, in other words, is facing immense yet conflicting challenges. On the one hand, a strong demand exists for higher education institutions to perform effectively and to achieve excellence. Learning more, faster, and better than the general public and staying at the cutting edge of knowledge and technology is an

important function of colleges and universities. On the other hand, the pressures for survival and short-term management concerns are enormous. Challenges related to inadequate resources, a declining portion of state and federal budget allocations, and public pressure to hold down costs tend to drive out an emphasis on innovation and excellence. Moreover, at the same time the American higher education is blamed for the economic decline of the U.S. in the 1980s, it is trumpeted as the primary hope for a brighter future. Cyert continued: "Almost everyone believes that the future strength, even survival, of this nation's economy and social structure depends on the success of its educational system....The recovery or failure of America will be inextricably tied to how well colleges and universities respond."

In other words, U.S. colleges and universities are being counted on to improve markedly their levels of effectiveness at the same time that they are facing the most challenging and nonbenevolent environment in their history. As indicated by Cyert, resolving this tension may be the single greatest challenge faced by modern higher education managers and administrators.

In light of this challenge, we examined the relationship between declining financial resources and organizational effectiveness. But we also added another variable set to this relationship that was found in past literature to be closely associated with the fiscal strain and declining resource levels typical of higher education today. This variable set is named the "dirty dozen" because it consists of 12 negative, dysfunctional attributes that tend to arise in organizations faced with declining resources, downsizing, and cutbacks.

The results of our empirical analysis of four-year colleges and universities' performance produced good news as well as bad news. The *good news* is that institutions of higher education are likely to perform as effectively when facing conditions of decline as when facing conditions of abundance. Fiscal stress, scarcity of financial resources, and decline in revenues do not, by themselves, ensure that a college or university will operate less effectively than an institution with plentiful financial resources. As a rule, institutions in financial trouble are no less effective than institutions operating in comfortable economic conditions.

On the other hand, the *bad news* is that institutions that develop attributes typical of "the dirty dozen" in association with their decline and downsizing are likely to be under-performers as organizations. Institutional effectiveness is likely to be lower in colleges and universities with "the dirty dozen" than those who manage the decline without the associated negative attributes. When an institution faces downsizing and decline, in other words, if it manages those conditions without allowing "the dirty dozen" attributes to arise, effectiveness remains high. If "the dirty dozen" attributes emerge, however, organizational effectiveness also suffers relative to three domains of activity--a morale domain (i.e., student, faculty, and administrator satisfaction), an academic domain (i.e., student and faculty productivity and scholarly development), and an external domain (i.e., responsiveness to external constituencies and resources) (Cameron, 1981).

At least four implications are evident from the results of these analyses. *First, these findings help address the tension between short-term revenue issues (survival)*

and the more long-term aspirations for achieving excellence in higher education. The great challenge for managers and administrators identified by Cyert is not so much a trade-off between survival and excellence as it is a challenge to manage fiscal pressures in such a way as to avoid "the dirty dozen" attributes. Fiscal stress and high levels of excellence are not incompatible according to these results. Concerns with organizational survival do not necessarily deflect attention and energy away from striving for excellence. Instead, another set of management concerns lie closer to the heart of survival and excellence, namely "the dirty dozen".

Notably, these dirty dozen attributes relate primarily to two main factors, the leadership of the institution and the reactions of members of the institution (Cameron et al., 1987). Of the seven most significant dirty dozen attributes in distinguishing highly effective institutions from those with low levels of effectiveness, five relate to poor leadership. That is, institutions with low levels of effectiveness are significantly more likely to have centralized (non-involving) decision making and a non-prioritized approach to cost containment or cutback, to lack leadership credibility (and to be scapegoated and blamed by organization members), and to have high administrator turnover (i.e., who simply leave the institution in the midst of the crisis). In other words, poor leadership appears to be a much more significant factor leading to low institutional effectiveness than the amount of resources available.

This finding is consistent with research reported by House and Podsakoff (1994), Bass, (1990), and Yukl (1997), who identified strong links between organizational performance and institutional leadership. More than 30 empirical studies have been

conducted confirming that leadership behaviors and organizational effectiveness are significantly related. Effective leadership leads to effective organizational performance. Ineffective leadership leads to ineffective organizational performance (House & Podsakoff, 1994).

A second implication is strongly related to the first, namely, that the major predictors of effectiveness are under the control of management. Whereas it is often not possible to control the revenue stream in an institution, the emergence of fiscal stress, or a decline in required resources, managers can control the extent to which factors such as conflict, centralization, and politicking escalate. They can manage the process of innovation and planning so that decreases do not occur. They can influence the change process so that resistance and scapegoating are addressed directly and minimized. They can maintain open lines of communication, and involve organization members in changes so that morale and commitment remain high. That is, managers in institutions of higher education can control the emergence of "the dirty dozen" so that organizational effectiveness is not adversely affected.

Cameron (1994) found that avoidance of "the dirty dozen" in organizations that had engaged in downsizing, cutbacks, and restructuring was associated with six factors. One was the involvement of organization members as well as customers in the planning and implementation of the downsizing or cutback process. Top-down and autocratic mandates almost always escalated "the dirty dozen." A second was a visible, accessible, and visionary leader. While most leaders buffer themselves from direct contact with organization members when unpleasant conditions are faced and

unpleasant decisions have to be made, and while most leaders regress to a short-term, crisis orientation instead of a visionary, future-oriented orientation, it was leaders' accessibility and vision under conditions of fiscal stress that most counteracted the dirty dozen. A third factor was over-communication of "nice-to-know" as well as "need-to-know" information. All organizations avoiding "the dirty dozen" shared a great deal of information broadly, consistently, and repeatedly with an extensive array of organization members. Fourth, careful analyses of organizational processes, capabilities, and core competencies in advance of cutback and downsizing implementation was crucial. Knowing in advance the redundancies, bottlenecks, and inefficiencies as well as the strengths, competencies, and capabilities of the organization was crucial to avoid unfair and uninformed decisions. Fifth, the formation of cross-functional and cross-level teams was a necessary part of the planning, implementation, and evaluation process associated with downsizing. The formation of cross-level as well as cross-functional teams was important. Sixth, the implementation of congruent appraisal, reward, and development systems that were viewed as congruent with the objectives of the cutback were crucial. Equity and fairness along with consistent incentives helped avoid the emergence of the twelve negative organizational attributes.

The point is, specific leadership actions have been found to be effective in avoiding dirty dozen attributes. These attributes do not represent sophisticated management techniques or counter-intuitive activities, of course, but they do help mitigate the negative effects of "the dirty dozen" and help maintain high levels of organizational effectiveness, even when facing fiscal strain.

Third, it is equally likely that, rather than "the dirty dozen" causing ineffectiveness during decline and financial difficulty, the reverse may be true. That is, when an institution is performing poorly and then encounters decline, "the dirty dozen" attributes may be a common result. Ineffectiveness may be the a priori condition that must be managed successfully in order for "the dirty dozen" attributes to be avoided, regardless of the financial circumstances encountered.

Again, however, this implication provides an important action agenda for leaders in institutions of higher education. It highlights the manageable circumstances that administrators face, even in the midst of financial stress. They remain clearly in control of the key determinants of performance. Since a significant negative association exists between organizational effectiveness and "the dirty dozen" attributes, addressing the three core domains of institutional effectiveness may be a critical priority for administrators when financial decline is encountered. In particular, addressing (1) the satisfaction and morale of students, faculty, and administrators (a *morale* domain), (2) the academic and scholarly productivity and development of students and faculty members (an *academic* domain), and (3) the responsiveness of the institution to key external constituencies such as the local community, alumni, recruiters, and so forth (an *external* domain) may be the key to organizational effectiveness and to an absence of "the dirty dozen".

Previous research has reported that the managerial actions that most affect these three domains are maintaining a proactive, innovative approach to institutional improvement and the inclusion of external constituencies in the institution's strategic

planning efforts (Cameron, 1986). This study's findings, similarly, may provide a way to predict in advance the areas in the institution that need special attention. That is, the relationship between ineffectiveness and "the dirty dozen" clearly identifies a management agenda for administrators facing fiscal stress and decline in their institutions.

A fourth implication of these results reinforces a finding in previous downsizing research, namely, that the <u>way</u> in which downsizing and decline occur is more important than <u>that</u> they occur (Cameron, et al., 1993; Cameron, 1994). In other words, regardless of the environment encountered, the methods used by managers and administrators to address the emerging challenges have more to do with the organization's resulting effective or ineffective performance than the fact that the organization encountered the environment in the first place. Process and procedure take precedence over the presence of problems.

In this study, the occurrence of fiscal decline and financial difficulty was not strongly predictive of either effectiveness or ineffectiveness. Rather, the associated attributes that relate to the way in which managers manage, and the processes that typify an institution's operations--namely, "the dirty dozen"--are the greatest predictors of performance. Moreover, the most significant attributes in "the dirty dozen" tended to be those associated with leadership actions as opposed to institutional member actions. Thus, it seems clear from these results that managers have an opportunity to significantly affect the performance of their own institutions.

In sum, whereas colleges and universities face an increasingly inhospitable environment, and the amount of decline, downsizing, and failure is now higher than ever, fiscal stress need not portend a dismal future for institutional performance. Managers in institutions of higher education remain the key determinants of how their own institutions will performance, regardless of the condition of the external environment.

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Figure 1 ***Relationships Among Financial Decline, "The Dirty Dozen", and Organizational Effectiveness***

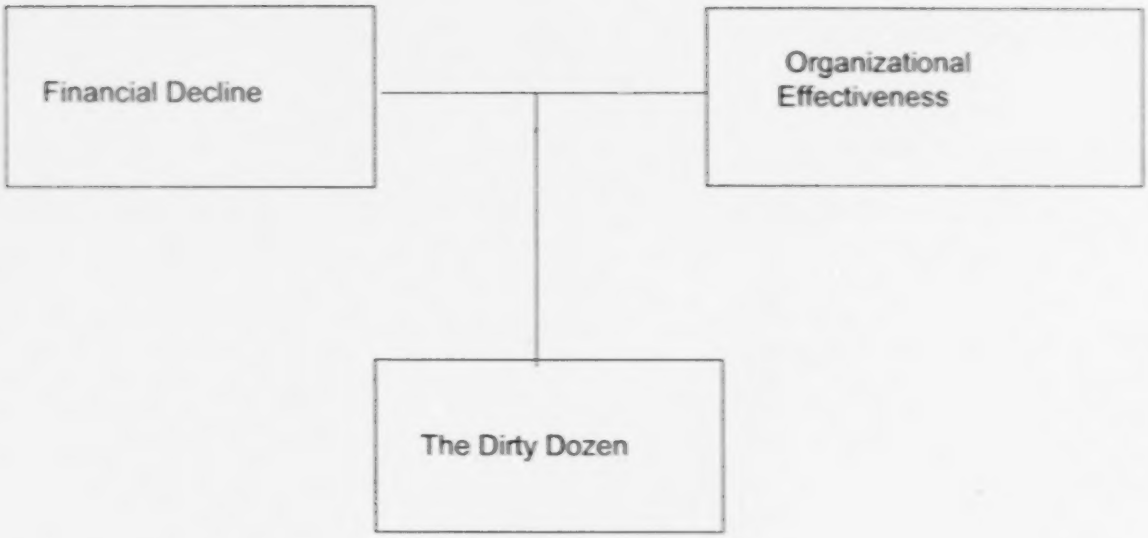

Table 1 ***Nine Dimensions of Organizational Effectiveness***
(SOURCE: Cameron, 1981)

Morale Domain

Student Educational Satisfaction: The extent of students' satisfaction with their educational experiences at the institution.

Faculty and Administrator Employment Satisfaction: The satisfaction of faculty members and administrators with their employment and jobs at the institution.

Organizational Health: The extent of smooth functioning of the institution in terms of its processes and operations.

Academic Domain

Student Academic Development: The extent of academic attainment, growth, and progress made by students at the institution, and the opportunities provided by the institution.

Professional Development and Quality of the Faculty: The extent of professional attainment and development of the faculty, and the amount of stimulation toward professional development provided by the institution.

Student Personal Development: The extent of student development socially, culturally, and emotionally, and the opportunities provided by the institution for personal development.

External Adaptation

Student Career Development: The extent of occupational or vocational development of students and the opportunities provided for occupational development by the institution.

System Openness and Community Interaction: The emphasis placed on the interaction with, adaptation to, and service in the institution's external environment.

Ability to Acquire Resources: The extent to which the institution acquires resources from the external environment such as economic support, high quality students and faculty, research support, and political legitimacy.

Table 2 ***"The Dirty Dozen"***
(SOURCE: Cameron, Whetten, and Kim, 1987)

ATTRIBUTE	***EXPLANATION***
Centralization	Decision making is pulled toward the top of the organization. Less power is shared.
Short-term, crisis mentality	Long-term planning is neglected. The focus is on immediacy.
Loss of innovativeness	Trial and error learning is curtailed. Less tolerance for risk and failure associated with creative activity.
Resistance to change	Conservatism and the threat-rigidity response lead to "hunkering-down" and a protectionist stance.
Decreasing morale	Infighting and a "mean mood" permeates the organization.
Politicized interest groups	Special interest groups organize and become more vocal. The climate becomes politicized.
Nonprioritized cutbacks	Across-the-board cutbacks are used to ameliorate conflict. Priorities are not obvious.
Loss of trust	Leaders lose the confidence of subordinates, and distrust among organization members increases.
Increasing conflict	Fewer resources result in internal competition and fighting for a smaller pie.
Restricted communication	Only good news is passed upward. Information is not widely shared because of fear and distrust.

Lack of teamwork	Individualism and disconnectedness make teamwork difficult. Individuals resist cooperation and involvement.
Scapegoating leaders	Leadership anemia occurs as leaders are scapegoated, priorities are unclear, and a siege mentality prevails.

Table 3 Relationship Between Financial Resource and Performance Levels

Institutional Performance Levels	Financial Resource Levels			Column Totals
	Declining	Stable	Growing	
Low	50 (44%)	35 (33%)	25 (23%)	110
Average	34 (30%)	43 (40%)	34 (30%)	111
High	30 (26%)	29 (27%)	52 (47%)	111
Row Totals	114	107	111	332

Note: Column percentages are shown in parentheses.

Table 4 Differences on the Dirty Dozen Attributes of Declining Institutions Classified by Performance Levels

Dysfunctional Attributes	Institutional Performance Levels			Univariate
	Low	Medium	High	F-ratio
Decisions are centralized	3.68 (0.45)	3.46 (0.49)	3.23 (0.55)	7.77***
Planning is neglected	3.00 (0.52)	2.54 (0.47)	2.32 (0.63)	16.78***
Innovation is declining	2.54 (0.52)	2.47 (0.35)	2.27 (0.31)	3.73*
Administrators are scapegoats	2.87 (0.54)	2.76 (0.41)	2.50 (0.49)	5.20**
Strong resistance to change	3.24 (0.50)	3.12 (0.51)	2.75 (0.50)	9.06***
High administrative turnover	2.77 (0.83)	2.34 (0.51)	2.18 (0.44)	8.75***
Morale is decreasing	3.06 (0.59)	3.00 (0.51)	2.77 (0.57)	2.58
No place to cut expenditures	2.95 (0.61)	2.88 (0.51)	2.88 (0.52)	0.21
Interest groups are more vocal	3.15 (0.56)	3.22 (0.39)	2.86 (0.44)	5.03**
Administrators have low credibility	2.91 (0.46)	2.68 (0.36)	2.32 (0.50)	16.52***
Cutbacks are not prioritized	2.75 (0.37)	2.57 (0.35)	2.36 (0.40)	10.01***
Conflict is increasing	3.01 (0.57)	2.78 (0.44)	2.42 (0.54)	11.75***

* = (p< .05) ** = (p< .01) *** = (p< .001)
Note: Standard deviations are in parentheses.